



**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:

Lewis GRUBER et al.

Group Art Unit: 2881

Application No.: 10/630,904

Examiner: Paul M. GURZO

Filed: July 31, 2003

Customer No.: 57362

Confirmation No.: 9618

For: SYSTEM AND METHOD OF SORTING MATERIALS USING HOLOGRAPHIC  
LASER STEERING

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Restriction Requirement dated June 28, 2005, in which the Applicants were requested to elect one of nineteen Species for prosecution on the merits, the Applicants respectfully **traverse** the Examiner's requirement for restriction and request reconsideration thereof for the following reasons:

The Examiner has restricted the claims of this invention into nineteen Species. Applicants note that the Examiner is essentially dividing up the application into Species or Groups which track the independent claims in the application, as well as those claims which belong to a broad area (i.e., optical trapping).

Applicant further notes that there are potentially two Species or Groups which the Examiner has not identified. The first, Group 20, is drawn to an apparatus for sorting objects, including a beam steering apparatus, and a structure having a surface on which the objects are distributed; and the second, Group 21, is drawn to a means for introducing the objects into an input channel.

With respect to the twenty one Species, the Applicants respectfully submit that Groups 1 and 2 are essentially the same and a search thereon should not be more burdensome on the Examiner to conduct for one trap vs. multiple traps. Further, since Groups 11, 14 and 15 involve optical trapping, it is appropriate that these Groups be combined with Groups 1 and 2.

Groups 10 and 13, which involve sorting objects in a gel, should be combined as one Group.

Further, since Groups 9, 12, 16, 17, 18, 19 and 20, all involve using a beam steering apparatus, and since Groups 18 and 19, appropriately constitute a subset of this Group since they are drawn to sorting and destroying objects using the beam steering apparatus, Groups 9, 12, 16, 17, 18, 19 and 20, should be combined by the Examiner.

Finally, Groups 8 and 21 should be combined as involving methods and an apparatus for introducing, funneling, and sorting objects.

**Accordingly, the Applicants respectfully traverse the Examiner's Restriction Requirement and propose instead that there are only nine (9) Species or Groups in the present application. They are:**

Group 1 – drawn to optical trapping and apparatuses and methods thereof – Claims 8-11, 29, 40-46, 48-59, 71-80, 82-136, 138-156, and 158-161;

Group 2 – drawn to an imaging illumination source – Claim 75;

Group 3 – drawn to a method and system for monitoring movement via an optical data stream – Claims 82-84, and 136-137;

Group 4 – drawn to a movement of cells based on a predetermined movement of each optical trap – Claims 45, 90-93, 100, 146-149, 155, and 156;

Group 5 – drawn to a computer program that maintains a record of each cell – Claims 83 and 139;

Group 6 – drawn to cell sorting of X and Y sperm – Claims 7, 47, and 157;

Group 7 – drawn to a method of sorting objects including the steps of introducing the objects into an input channel etc. – Claims 1-6, 13-19, and 69;

Group 8 – drawn to an apparatus and method of sorting objects using a beam steering apparatus – Claims 20-24, 26, 28, 30-32, 36, 38, 39, 60-63, 65-68, 70, 105-136, 138-156, and 158-164;

Group 9 – drawn to an apparatus and method of sorting objects including distributing the objects in a gel, etc. – Claims 25, 27, 33-38, and 64.

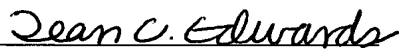
**Should the Examiner agree with Applicants' analysis, Applicants respectfully elect Group 8 – drawn to an apparatus and method of sorting objects using a beam steering apparatus (Claims 20-24, 26, 28, 30-32, 36, 38, 39, 60-63, 65-68, 70, 105-136, 138-156, 158-164) for prosecution in this application.**

Should the Examiner **disagree** with Applicants' proposed grouping, Applicants respectfully elect **Group 1** – drawn to optical trapping and apparatuses and methods thereof (Claims 8-11, 29, 40-46, 48-59, 71-80, 82-136, 138-156, and 158-161).

If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

The Applicants hereby petition for any extensions of time which may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account 50-0951.

Respectfully submitted,

  
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